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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/669,946      | 09/26/2000  | Tetsushi Yoshida     | 00691/LH            | 5773             |

7590

10/20/2003

Frishauf Holtz Goodman Langer & Chick PC  
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EXAMINER

TON, MINH TOAN T

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/669,946

Applicant(s)

YOSHIDA ET AL. 

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 8-11, 14-16, 18-21, 24-27, 29-31, 35 and 38-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-7, 12, 13, 17, 22, 23, 28, 32-34, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Election/Restriction***

1. An election without traverse of claims 1, 5-7, 12-13, 17, 22-23, 28, 32-34, 36-37 *and* 48 is acknowledged. Claim 48 was inadvertently grouped with species (B1), however it should have been grouped with species (E1) since it depends on claim 38. Claim 48 is hereby withdrawn from consideration.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 5, 7, 12-13, 17, 22-23, 28, 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Iijima (US 6507380).

Iijima discloses a liquid crystal display apparatus comprising: a liquid crystal element 140 inherently sandwiched between front and rear substrates, wherein each of the substrates has an electrode pattern (E field inherently applied); a first reflection polarizing plate 130 arranged on the front side of the liquid crystal element; a reflecting rear member 160 arranged behind the liquid crystal element; a backlight element 190 arranged on the rear side of the reflecting rear member.

See at least Figures 1-5 and their descriptions in Iijima's descriptions (col. 9, line 50 to col. 14, line 57).

Iijima discloses the use of a phase difference film 14 (Applicant's optical element comprising a retardation plate/transparent film).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as applied to claims 1, 5, 7, 12-13, 17, 22-23, 28, 32-33 above.

The use of micro-lenses for a diffusing layer is common and known in the art for achieving advantages such as high light-uniformity → brighter display device. Therefore, it would have been obvious to one of ordinary skill in the art to employ micro-lenses for a

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diffusing layer is common and known in the art for achieving advantages such as high light-uniformity → brighter display device.

6. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima as applied to claims 1, 5, 7, 12-13, 17, 22-23, 28, 32-33 above, in view of Hittich (US 5578241) and Yajima et al (US 4909601).

Iijima discloses the LCD device having TN or STN liquid crystal cell, wherein the TN cell commonly comprises: twist angles between 80°-100° (see Hittich, col. 3, lines 46-50, as evidence).

It is known in the art that the TN liquid crystal liquid crystal material has a double refraction ratio  $\Delta n$  whose optimum value is in accordance with the primary color passing therethrough to obtain a high contrast ratio (see Yajima, col. 6, lines 47-51, as evidence). Thus, it would have been at least obvious to one of ordinary skill in the art to employ a TN liquid crystal liquid crystal material has a double refraction ratio  $\Delta n$  whose optimum value is in accordance with the primary color passing therethrough to obtain a high contrast ratio.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (703) 305-3489. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

October 17, 2003

  
TOANTON  
PRIMARY EXAMINER